Message

From: Gaughan, Daniel [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E5825FDF59F04CDB9F5BC64C9E898825-GAUGHAN, DANIEL]

Sent: 8/29/2019 11:52:47 AM

To: Bernard Nwosu [Ben.Nwosu@WestonSolutions.com]

Subject: Fwd: Canadian Radium & Uranium 2019

Ben

I am out of the office. Here is the email I received from Tonya Hudson if NAREL. I don't have her number but you should be able to email her.

Dan

Sent from my iPhone

Begin forwarded message:

From: "Hudson, Tonya" < hudson.tonya@epa.gov>

Date: August 20, 2019 at 4:56:33 PM EDT

To: "Gaughan, Daniel" < Gaughan.Daniel@epa.gov > Subject: RE: Canadian Radium & Uranium 2019

Thank you for your quick response as well, and the date typo was my error. I believe we have everything we need now. Thanks!

From: Gaughan, Daniel < Gaughan. Daniel@epa.gov>

Sent: Tuesday, August 20, 2019 3:39 PM

To: Hudson, Tonya < hudson.tonya@epa.gov>

Cc: White, Cindy < White. Cindy@epa.gov >; Chambers, Zachary < chambers.zachary@epa.gov >

Subject: RE: Canadian Radium & Uranium 2019

Tonya,

Thanks for getting back to me so quickly. See my responses in red text below.

Dan Gaughan

From: Hudson, Tonya < hudson.tonya@epa.gov>

Sent: Tuesday, August 20, 2019 10:21 AM

To: Gaughan, Daniel <Gaughan.Daniel@epa.gov>

Cc: White, Cindy < White. Cindy@epa.gov>; Chambers, Zachary < chambers.zachary@epa.gov>

Subject: Canadian Radium & Uranium 2019

Hi Dan,

Attached is the signed project acceptance form (PAF). We are able to accept and analyze the soil samples. Below are some additional items for further clarification:

1. When NAREL analyzed samples in 2016, we reported Ra-226 and Ra-228 by 21-day ingrowth gamma analysis. At that time, we did not have isotope-specific methods for the radiums in soil. We now have an isotope-specific method for Ra-226 in soils. This method has been approved and validated. We have applied for accreditation, but we have not received it yet. Do you want to keep with the 21-day ingrowth gamma analysis for Ra-226 as before or go with the isotope-specific method? (Please note that we prefer clients use Bi/Pb-214 results from the ingrowth

gamma instead of Ra-226 results because of interferences associated with Ra-226 analysis by gamma. Further explanation can be provided upon request.) Please use the 21-day ingrowth method as used in 2016.

- On the request form, you checked NAREL Standard for data reporting. Please take a look at the reports and EDDs provided in 2016, which are our standard reports, and verify they meet your needs. I will be happy to resend a package and EDD from 2016 if needed. Standard reporting is fine.
- 3. Also checked is NAREL standard MDCs. I am attaching the NAREL Radiochemistry QA Manual. Our current standard MDCs are listed in Appendix 18.1. Please verify these MDCs are acceptable. Any MDCs not listed can be provided upon request. Standard MDCs are fine

Please email Zach Chambers and me when you are ready to ship the samples.

Let me know if you have questions regarding the above, and as always, we look forward to working with you again,

Tonya

P.S. I just noticed an error in the shipment date on the PAF. It should be 2019 not 2018. Sorry about the date.